In the claims: The claims are as follows.

1. (Previously presented) A method, comprising:

an upper layer of a communication protocol for wireless communication of packets performing a slow release in which the upper layer removes from a buffer maintained by the upper layer the oldest packet in the buffer when the buffer is full and a new packet arrives, and does so independently of whether the oldest packet has been acknowledged by a radio layer that receives data as packets from the upper layer and prepares the packets for wireless transmission; and

the radio layer performing a local acknowledgement in which the radio layer sends a local acknowledgement to the upper layer on the occurrence of a predetermined event, the local acknowledgement indicating to the upper layer that the radio layer has received from a peer radio layer an acknowledgement that a packet has been successfully transmitted.

2. (Previously presented) A method as in claim 1, wherein in performing the local acknowledgement, the radio layer includes with the local acknowledgement a sequence number.

3. (Previously presented) A method as in claim 2, wherein the upper layer removes the packet in the buffer having a sequence number equal to the sequence number included with the local acknowledgement, and also removes all older packets in the buffer.

4. (Previously presented) A method as in claim 1, wherein the local acknowledgment triggers special mode buffer management by the upper layer in which the step of slow release is at least temporarily discontinued and steps are performed in which packets are instead removed by the upper layer whenever a subsequent

local acknowledgement is received along with a sequence number, the upper layer then removing the packet with the sequence number accompanying the local acknowledgement as well as all older packets.

5. (Previously presented) A method as in claim 4, further comprising returning to a normal-mode buffer management upon receiving a trigger-to-normal-mode local acknowledgment.

6. (Original) A method as in claim 5, wherein the trigger-to-normal-mode local acknowledgment is identified as such by the upper layer on the basis of whether or not it includes a sequence number.

7. (Original) A method as in claim 5, wherein the trigger-to-normal-mode local acknowledgment is identified as such by the upper layer on the basis of whether or not a flag it includes is set.

8. (Original) A method as in claim 7, wherein the local acknowledgment includes a sequence number.

9. (Original) A method as in claim 8, wherein the sequence number serves as a signal to the upper layer to remove the packet with the sequence number as well as all older packets.

10. (Original) A method as in claim 7, wherein the local acknowledgment does not include a sequence number.

11. (Original) A method as in claim 5, wherein the trigger-to-normal-mode local acknowledgment is identified as such by the upper layer on the basis of whether or not it is a different type of message than the local acknowledgment triggering special mode buffer management.

12. (Original) A method as in claim 11, wherein the local acknowledgment includes a sequence number.

13. (Original) A method as in claim 12, wherein the sequence number serves as a signal to the upper layer to remove the packet with the sequence number as well as all older packets.

14. (Original) A method as in claim 11, wherein the local acknowledgment does not include a sequence number.

15. (Original) A method as in claim 4, wherein the upper layer does not remove packets from the buffer while in special mode unless the buffer is full.

16. (Original) A method as in claim 4, wherein the upper layer uses a larger buffer while in special mode.

17. (Original) A method as in claim 4, further characterized in that the local acknowledgement is included with a handover trigger message.

18. (Previously presented) A method as in claim 1, wherein in performing the local acknowledgement the radio layer signals to the upper layer a release of the buffer to a target entity.

19. (Previously presented) A computer program product comprising: a computer readable storage structure embodying computer program code thereon for execution by one or more computer processors in a radio access network, with said computer program code characterized in that it includes instructions for performing the method of claim 1.

20. (Previously presented) A radio access network comprising equipment having means for performing the slow release and means for performing the local acknowledgement of the method of

claim 1.

21. (Previously presented) An apparatus of a radio access network of a wireless communication system, comprising:

an upper layer, configured to perform buffer management according to either a normal mode or a special mode, and in the normal mode the upper layer performs a slow release procedure in which it removes from a buffer it maintains the oldest packet in the buffer when the buffer is full and a new packet arrives, and does so independently of whether the oldest packet has been acknowledged by a radio layer that receives data as packets from the upper layer and prepares the packets for wireless transmission; and

the radio layer, configured to trigger the upper layer to perform buffer management according to the special mode by sending a local acknowledgment to the upper layer on the occurrence of a predetermined event.

22. (Previously presented) An apparatus as in claim 21, wherein the radio layer is configured so that in triggering buffer management according to the special mode, the radio layer includes with the local acknowledgement a sequence number.

23. (Previously presented) An apparatus as in claim 21, wherein the upper layer is configured so that in special mode the upper layer at least temporarily discontinues the slow release procedure and instead removes packets from the buffer whenever a subsequent local acknowledgement is received along with a sequence number, the upper layer then removing the packet with the sequence number accompanying the local acknowledgement as well as all older packets.

24. (Previously presented) An apparatus as in claim 23, wherein the radio layer is configured to trigger the upper layer to

return to normal mode by providing to the upper layer a trigger-to-normal-mode local acknowledgment.

25. (Previously presented) An apparatus as in claim 21, wherein the upper layer is configured so that upon receiving the local acknowledgement, the upper layer releases the buffer to a target entity instead of performing buffer management according to the special mode.

26. (Original) A wireless communication system, comprising a core network, a terminal, and a radio access network in turn comprising an apparatus according to claim 21, and communicatively coupling the terminal to the core network.

27. (Previously presented) An apparatus, comprising:

an upper layer of a communication protocol for wireless communication of packets, configured to perform a slow release in which the upper layer removes from a buffer maintained by the upper layer the oldest packet in the buffer when the buffer is full and a new packet arrives, and does so independently of whether the oldest packet has been acknowledged by a radio layer that receives data as packets from the upper layer and prepares the packets for wireless transmission; and

the radio layer, configured to perform a local acknowledgement in which the radio layer sends a local acknowledgement to the upper layer on the occurrence of a predetermined event, the local acknowledgement indicating to the upper layer that the radio layer has received from a peer radio layer an acknowledgement that a packet has been successfully transmitted.

28. (Previously presented) A method, comprising:

an upper layer of a communication protocol for wireless communication of packets performing buffer management according to either a normal mode or a special mode, and in the normal mode the upper layer performs a slow release procedure in which it removes from a buffer it maintains the oldest packet in the buffer when the buffer is full and a new packet arrives, and does so independently of whether the oldest packet has been acknowledged by a radio layer that receives data as packets from the upper layer and prepares the packets for wireless transmission; and

the radio layer triggering the upper layer to perform buffer management according to the special mode by sending a local acknowledgment to the upper layer on the occurrence of a predetermined event.